

CITY COUNCIL

ALAN S. NAKANISHI, Mayor  
PHILLIP A. PENNINO  
Mayor Pro Tempore  
SUSAN HITCHCOCK  
EMILY HOWARD  
KEITH LAND

# CITY OF LODI

CITY HALL, 221 WEST PINE STREET  
P.O. BOX 3006  
LODI, CALIFORNIA 95241-1910  
(209) 333-6702  
FAX (209) 333-6807

H. DIXON FLYNN  
City Manager  
SUSAN J. BLACKSTON  
City Clerk  
RANDALL A. HAYS  
City Attorney

October 18, 2001

To All Mayors and City Council Members  
Within San Joaquin County:

**RE: LODI CITY COUNCIL TOWN HALL MEETING, OCTOBER 25, 2001**

I would like to cordially invite you to attend the Town Hall meeting of the Lodi City Council, which will be held on Thursday, October 25, 2001, at the Carnegie Forum, 305 W. Pine Street, Lodi.


The topic of the meeting will be "Discussion of water issues" a subject of great importance to all cities in San Joaquin County. Our Public Works Director has lined up a number of guest speakers for the evening, a copy of which list is enclosed for your information.

This special Town Hall meeting is provided as information only and will be televised live on our local cable station, Channel 30, and replayed on Friday, October 26 at 6:00 p.m.

If you are interested in attending this informational meeting, please contact the City Clerk's Office at (209) 333-6702 by October 24 to reserve a seat in the Council Chambers.

I hope to see you there!

Sincerely,



Alan S. Nakanishi  
Mayor of the City of Lodi

ASN/JMP

Enclosure

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**LODI CITY COUNCIL  
TOWN HALL MEETING**

**Discussion Regarding Water Issues  
Thursday, October 25, 2001  
7:00 p.m.**

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**Guest Speakers and Preliminary Program**

Introductions – **Mayor Nakanishi and San Joaquin County Supervisor Jack Sieglock**

**Panel Presentations**

- Overview of State Water System and City of Lodi System – **Richard Prima, Lodi Public Works Director**
- Delta Overview – **Dante Nomellini, Central Delta Water Agency**
  - ❖ Delta agencies
  - ❖ Historical issues
  - ❖ Current problems
  - ❖ CalFed impacts
- San Joaquin River/South Delta – **Alex Hildebrand, South Delta Water Agency**
  - ❖ Issues with export south
  - ❖ Flow/level problems
  - ❖ Water-quality problems
  - ❖ Stanislaus River/New Melones
- Eastern San Joaquin Groundwater Basin – **Anthony Barkett, Stockton East Water District**
  - ❖ History/purpose of SEWD
  - ❖ Facilities in place; quantity of water
  - ❖ Projects studied; issues and problems with implementation
  - ❖ Current plans
- North County – **Fred Weybret and Ed Steffani, North San Joaquin Water Conservation District**
  - ❖ History/purpose of NSJWCD
  - ❖ Facilities in place; quantity of water
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  - ❖ Current plans
- Groundwater Banking – **Anthony Saracino (invited), Groundwater Hydrologist**
  - ❖ Overview of concept and methods
  - ❖ Projects in other areas
  - ❖ Efforts to date and issues in San Joaquin County

Questions and answers/public comment

NOTE:  
This meeting is for informational purposes and  
will be televised live on Channel 30

*Honorable Mayor and Council  
City of Escalon  
P.O. Box 248  
Escalon, CA 95320*

*Honorable Mayor and Council  
City of Lathrop  
16775 Howland Road, Suite One  
Lathrop, CA 95330*

*Honorable Mayor and Council  
City of Manteca  
1001 W. Center  
Manteca, CA 95337*

*Honorable Mayor and Council  
City of Ripon  
59 N. Wilma Avenue  
Ripon, CA 95366*

*Honorable Mayor and Council  
City of Stockton  
425 N. El Dorado Street  
Stockton, CA 95202-1997*

*Honorable Mayor and Council  
City of Tracy  
325 E. Tenth Street  
Tracy, CA 95376*

*San Joaquin County  
Board of Supervisors  
22 E. Weber Avenue, Room 701  
Stockton, CA 95202*

***Thank you** very much for taking the time to present  
valuable information at the Lodi City Council Special Town Hall  
meeting on October 25, 2001.*

*Your expertise and knowledge in the subject of water  
helped to provide a well-rounded, comprehensive panel discussion.*

*Please accept this gift as a token of our appreciation for  
your participation in further educating the public of the water  
issues affecting Lodi and the surrounding communities.*

*Alan S. Nakanishi  
Mayor*

*Phillip A. Pennino  
Mayor Pro Tempore*

*Susan Hitchcock  
Council Member*

*Emily Howard  
Council Member*

*Keith Land  
Council Member*

## Jennifer Perrin

---

**From:** Jennifer Perrin  
**Sent:** Tuesday, October 30, 2001 3:02 PM  
**To:** 'detwank@att.net'  
**Cc:** Richard Prima  
**Subject:** RE: Could you help me?

I am responding to you on behalf of the City Clerk. I have hard copies of the handouts presented at the 10/25 Town Hall meeting. I would be more than happy to mail them to you, if you like. An electronic version might possibly be obtained from Public Works Director Richard Prima, and I have forwarded a copy of this message to him for handling.

The minutes from the 10/25 Town Hall meeting will be approved by the City Council in approximately four weeks, following which you can access off our web site at [www.lodi.gov](http://www.lodi.gov). Please contact our office should you have any further questions. Thank you.

Jennifer M. Perrin  
Deputy City Clerk  
City of Lodi

-----Original Message-----

From: detwank@att.net [mailto:detwank@att.net]  
Sent: Thursday, October 25, 2001 12:53 PM  
To: nakanishi@lodi.gov  
Subject: Could you help me?

Greetings Mayor Nakanishi:

I'm Dr. Dennis Schwank, owner/operator of the educational website "Water Is Liquid Gold" at

<http://www.waterisliquidgold.org/>

and I just learned of tonight's town-hall meeting by the Lodi City Council from today's Record (Stockton) article "Lodi council to study water-supply issues". I cannot attend because of a previous commitment but the information provided at this meeting could be invaluable to ALL citizens in northern California.

Is there any way for me to get transcripts/material which I could load onto my site? This is an educational opportunity for thousands which I'd hate to miss.

Please help me.

Sincerely,

Dennis Schwank, Ph.D.

# COPY

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Please help me.

Sincerely,

Dennis Schwank, Ph.D.

Jennifer -  
Attached are 2 minutes  
in the meeting. Ask  
him to contact Phil  
for about recording.

Don't know how  
+ 10 minutes will be  
recorded by Phil  
on 10/25/01. If not  
Give him web  
site so he can  
get off Internet

John - attached  
1  
to me  
— JB

**LODI CITY COUNCIL  
TOWN HALL MEETING**

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FIGURE 3-1  
Distribution of Average Annual Precipitation and Runoff

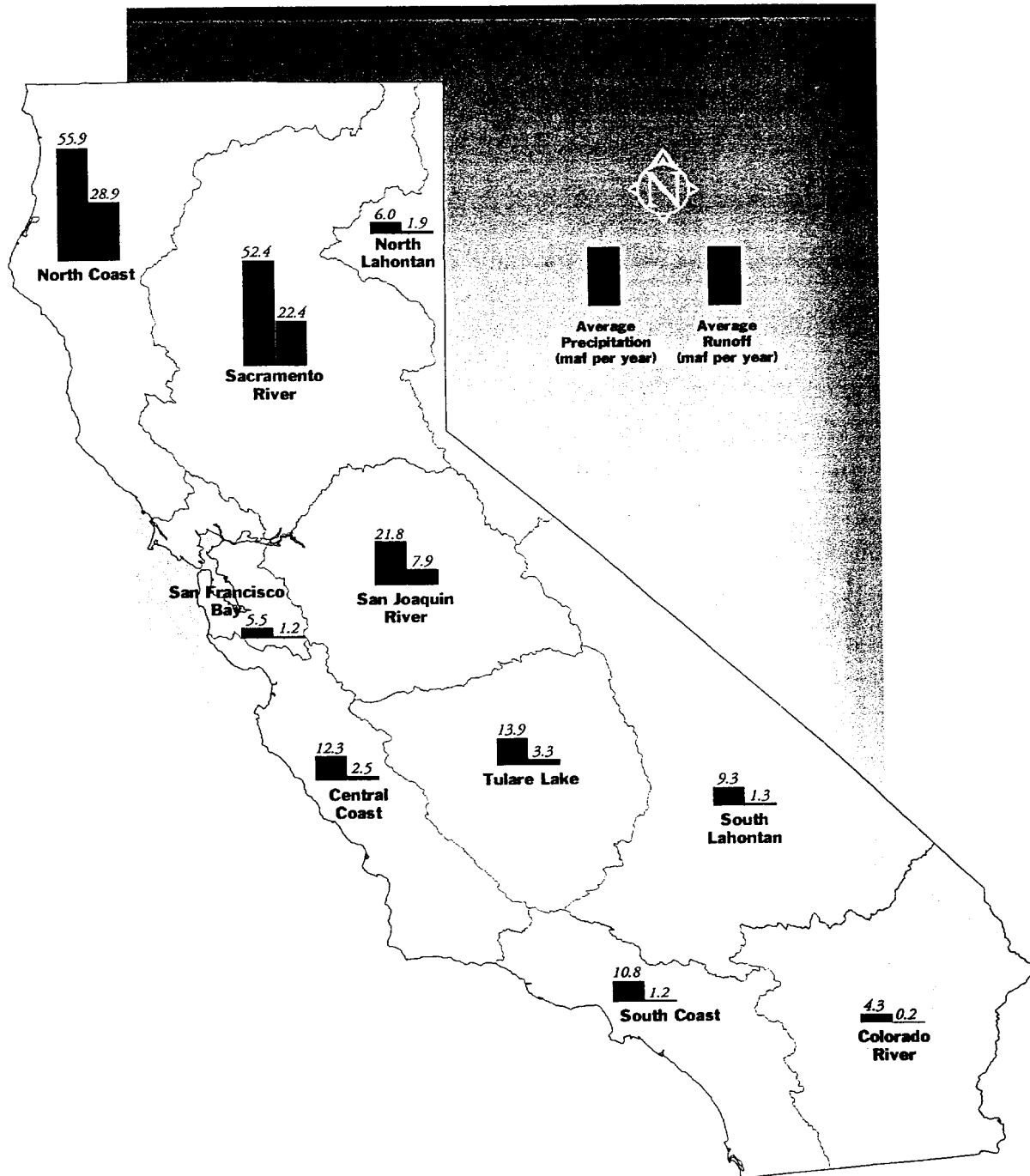
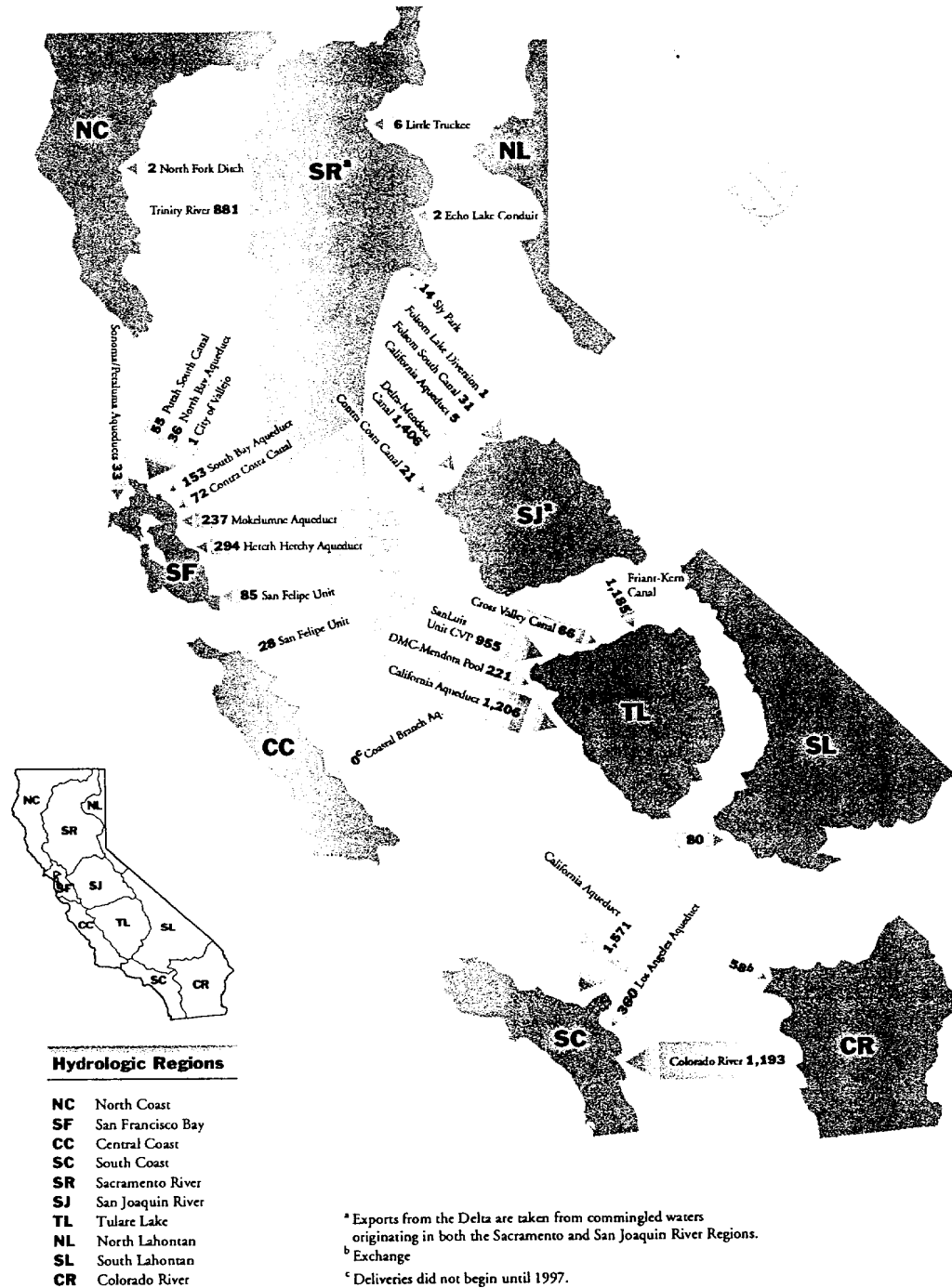


FIGURE 1-4.  
California's Major Water Projects



FIGURE 3-2  
Regional Imports and Exports, 1995 Level of Development  
1995 Level of Development (taf)





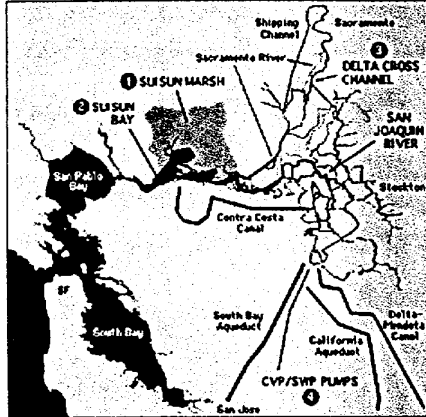
## The Bay-Delta Ecosystem

**1. SUISUN MARSH** Largest brackish water wetland complex in western U.S. Wildlife habitat remains in less than 10,000 acres of undiked tidal marsh.

**2. SUISUN BAY** Broad, shallow region of San Francisco Bay west of of Delt

**3. DELTA CROSS CHANNEL -** Constructed channel diverting Sacramento River water across the central Delta to the state and federal water project pumps, and the historical location of the biologically productive salt-freshwater mixing zone.

**4. CVP/SWP PUMPS -** Separate State Water Project and federal Central Valley Project facilities that provide the energy to move water from the Sacramento and San Joaquin Rivers through the Delta and into canals feeding agricultural and urban areas.

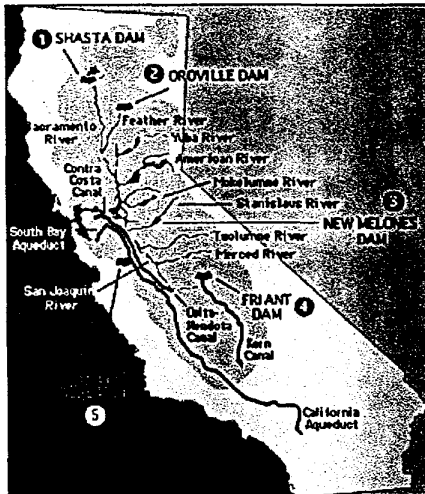


## The San Francisco Bay-Delta Watershed

**1. SHASTA DAM** - Keystone on the Central Valley Project, captures Sacramento River's Northern California watershed. Denies access to historical spawning grounds of winter and spring chinook salmon runs.

**2. OROVILLE DAM** - State Water Project facility which stores Feather River water for export to San Joaquin Valley and Southern California.

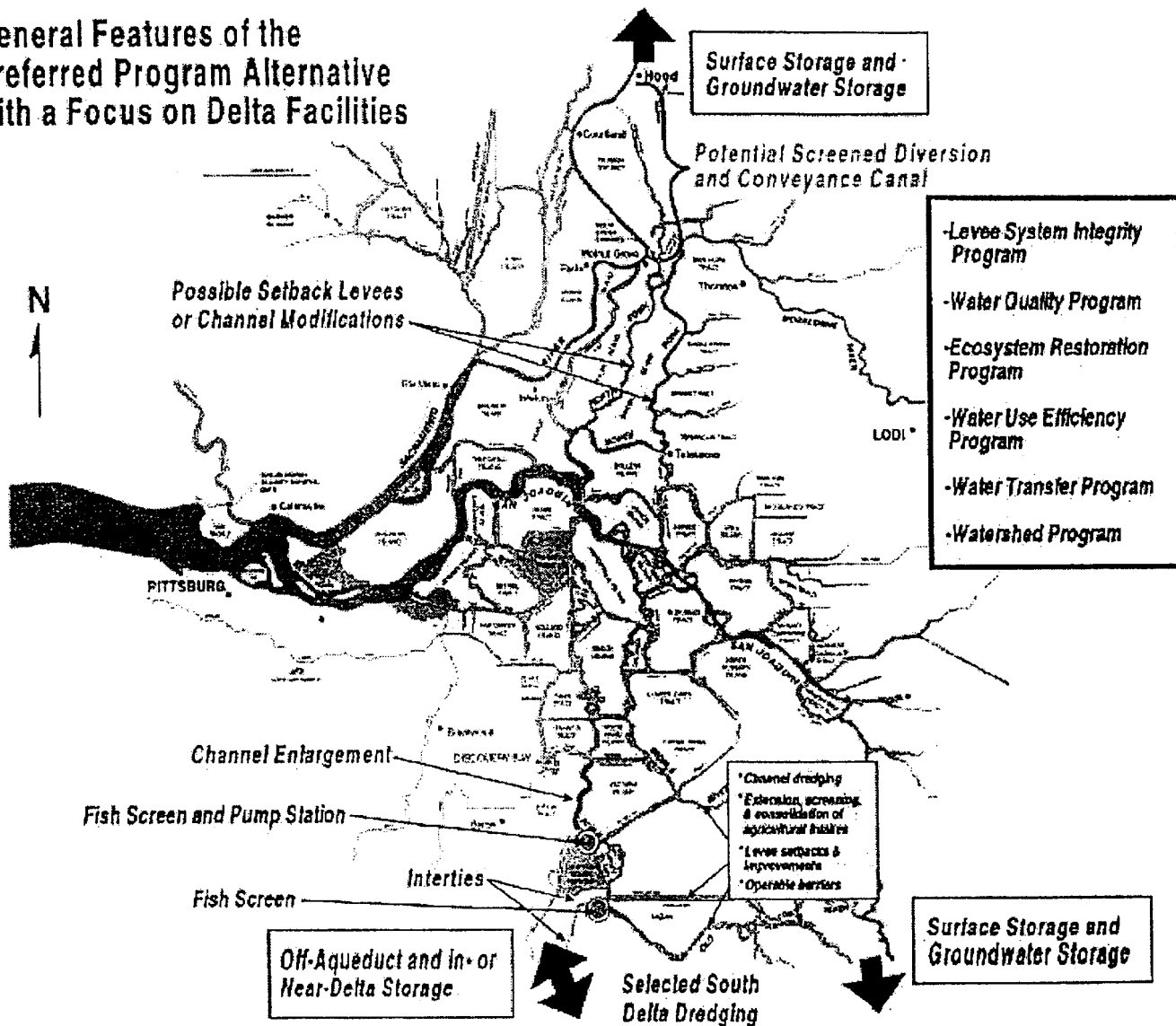
**3. NEW MELONES DAM** - Central Valley Project facility which stores Stanislaus River water.



**4. FRIANT DAM** - Central Valley Project facility which stores complete flow of upper San Joaquin River for agricultural use. Eliminated entire spring chinook salmon run.

**5. SAN LUIS RESERVOIR** - Jointly Operated state-federal facility which stores water exported from the Delta for later release to San Joaquin Valley agriculture and Southern California cities.

# General Features of the Preferred Program Alternative with a Focus on Delta Facilities





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## Introduction to the CALFED Bay-Delta Program's Conveyance Program

Flexible and efficient movement of water through the Bay-Delta system - conveyance - is integral to achieving CALFED's water supply reliability goals. Modification of the existing conveyance system also benefits the ecosystem, water quality, and levee integrity within the Bay-Delta system.

**GOALS AND OBJECTIVES:** The goal for Delta conveyance is to identify and implement conveyance features that will improve water supply reliability for in-Delta and export water users, support continuous improvement in drinking water quality and complement ecosystem restoration.

The ROD adopts a through-Delta approach for water conveyance improvements and water quality enhancement. The strategy is to improve the Delta's ecological health prior to or concurrent with significant construction actions and to obtain scientific data on the best operational practices to protect fish.

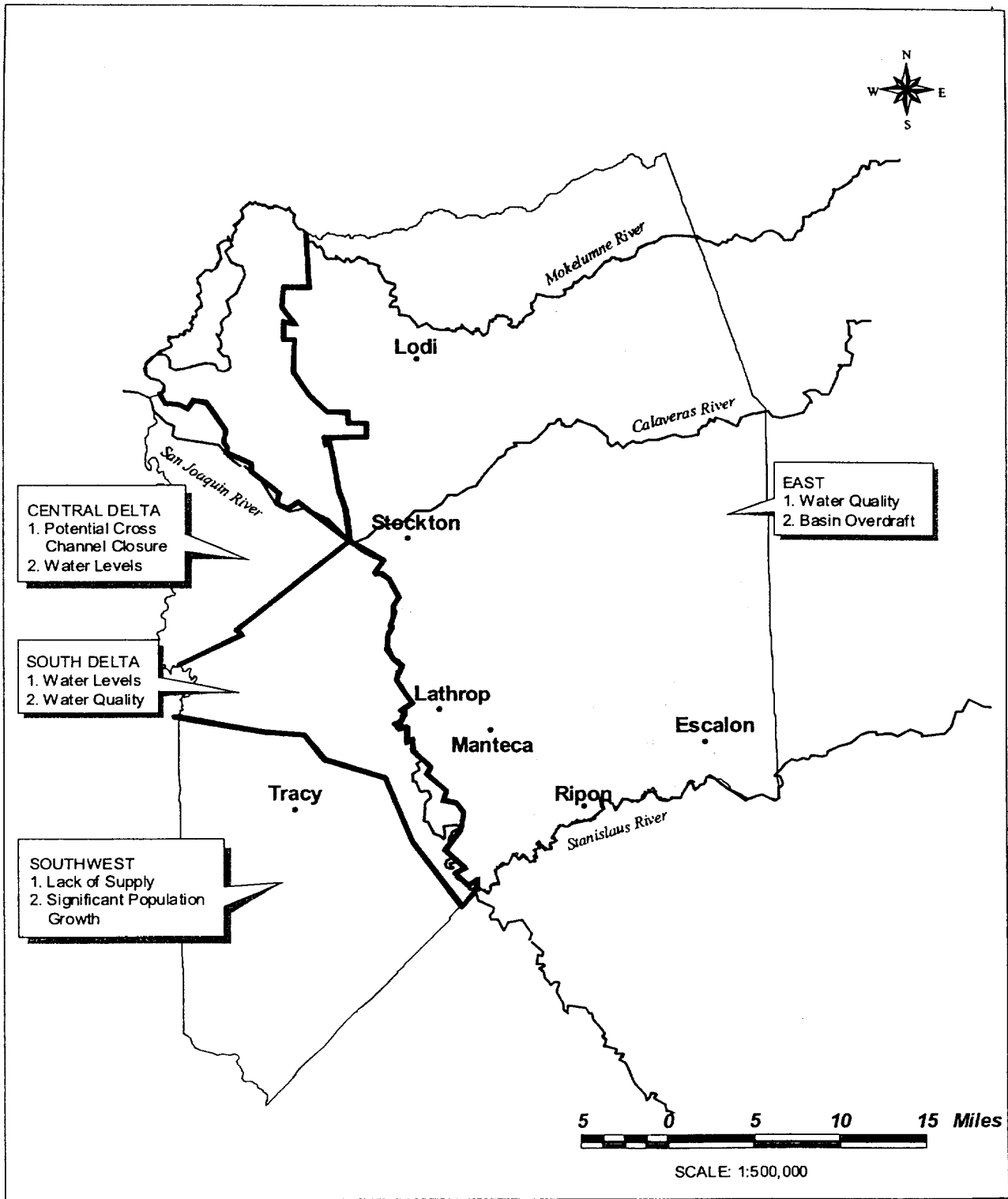
Proposed North Delta improvements include modifying and improving Delta Cross Channel gate operations, dredging and/or setback levees on the Mokelumne River, and creating additional floodplain, wildlife, and fish habitat. CALFED also will study and evaluate a Screened Through-Delta Diversion facility on the Sacramento River with a range of diversion capacities up to 4,000 cfs. Actions in the North Delta are to improve steelhead and salmon survival ability, and improve water quality and water supply reliability. DWR and Reclamation will co-manage Conveyance Program actions.

US Bureau of Reclamation's Tracy Fish Test Facility Project Information Web Site:  
[www.mp.usbr.gov/tftf](http://www.mp.usbr.gov/tftf)



[Return to Programs](#)

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Source:

Figure 2-3

# Cumulative Change in Storage from San Joaquin County IGSM Model

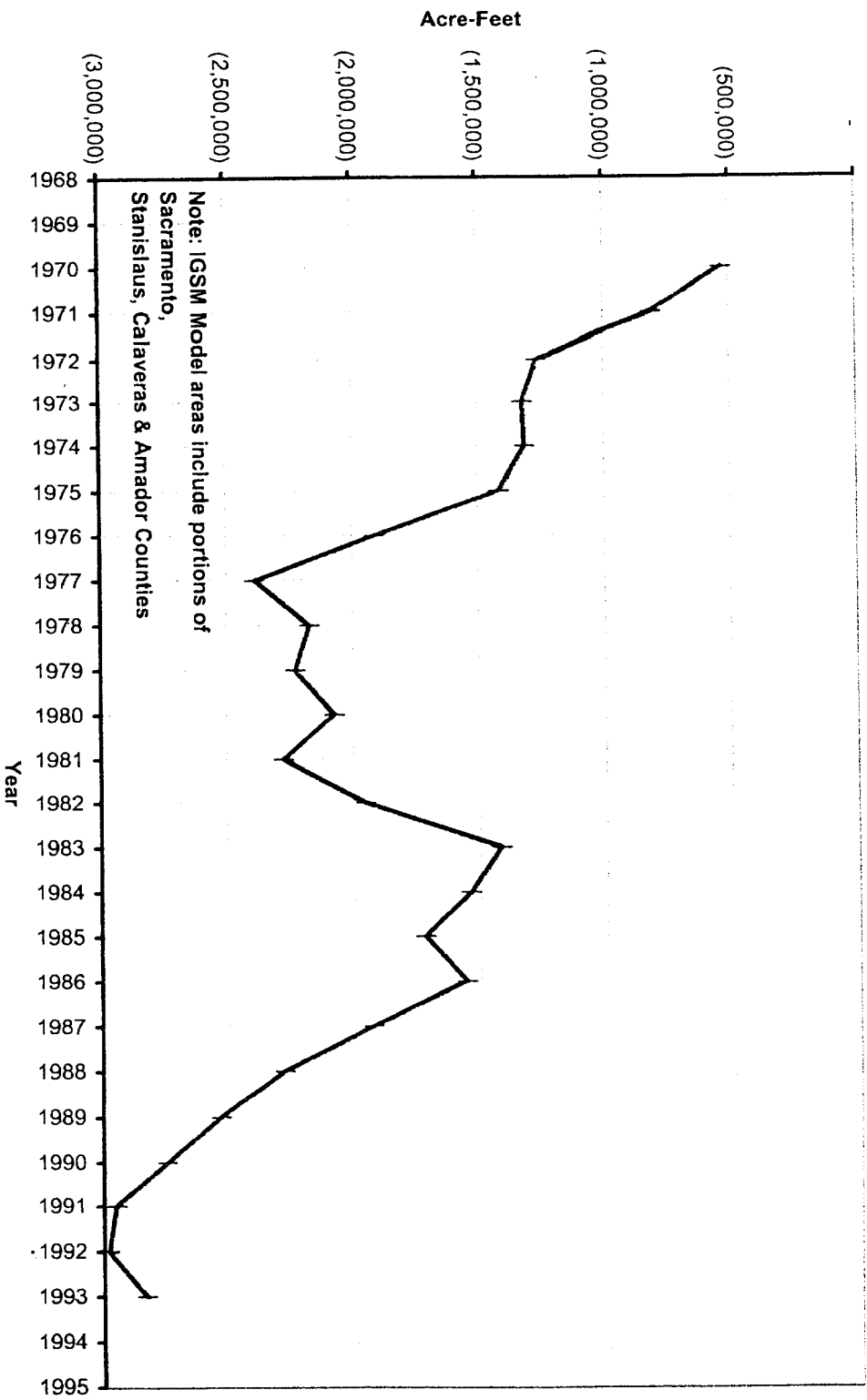
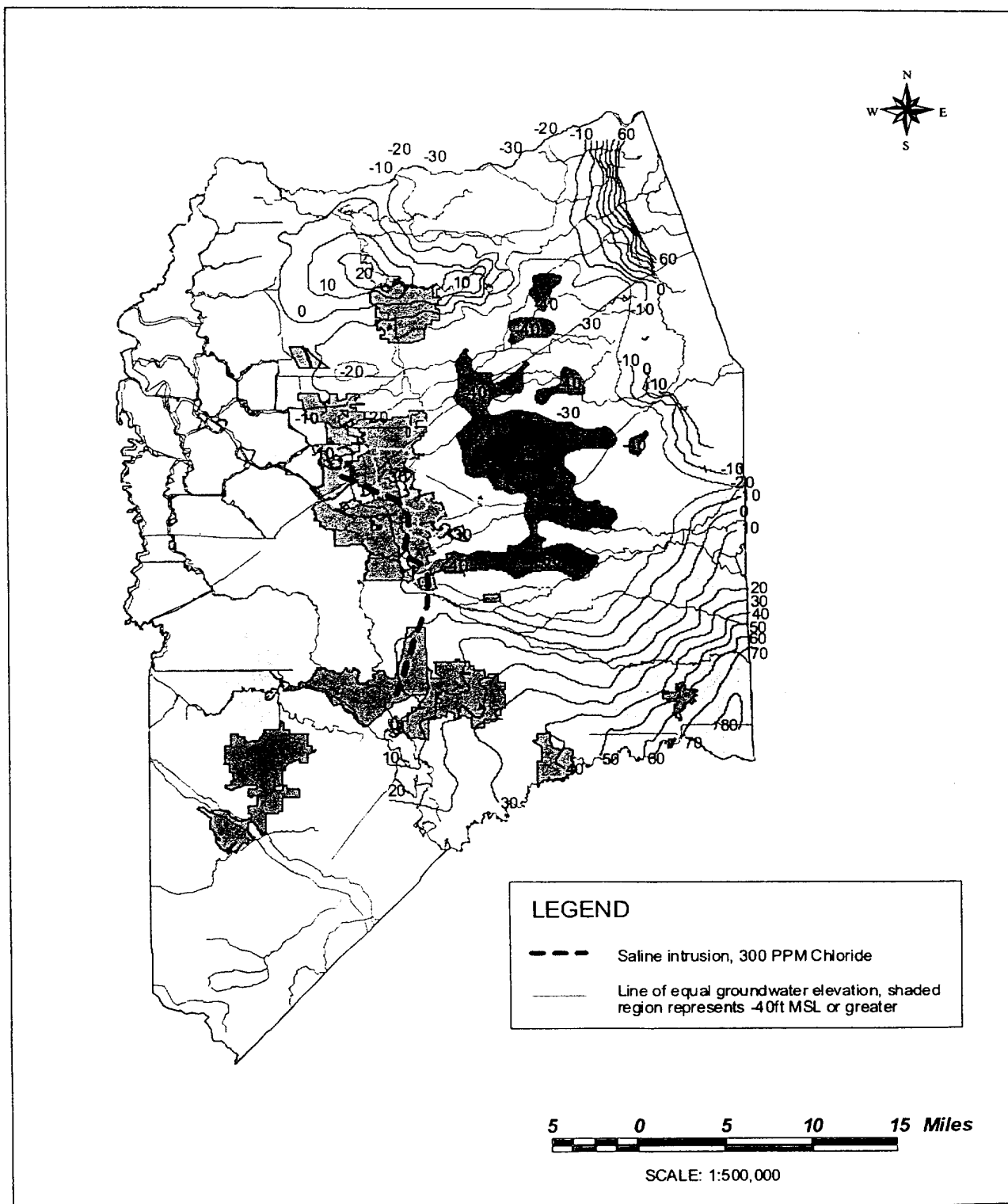
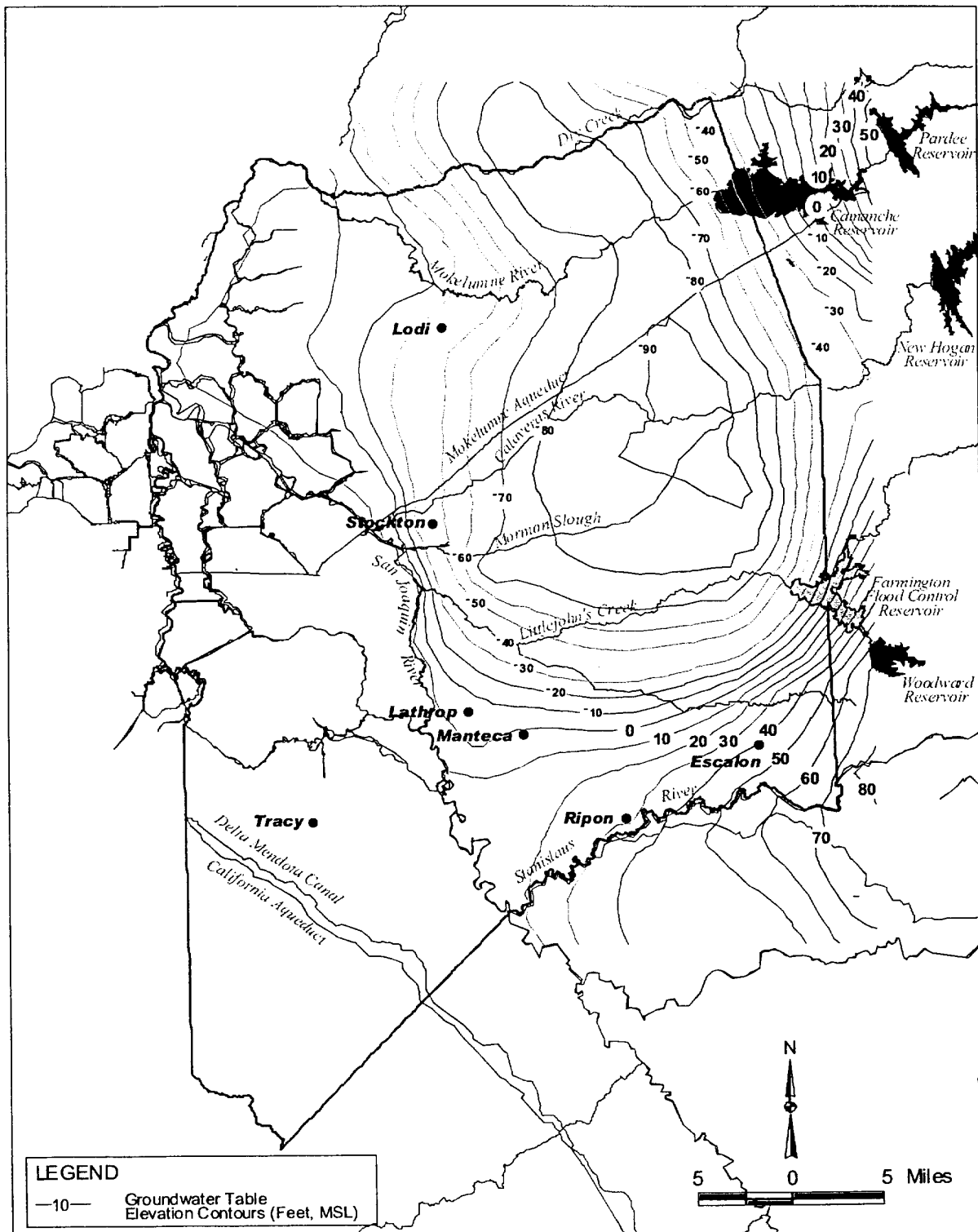


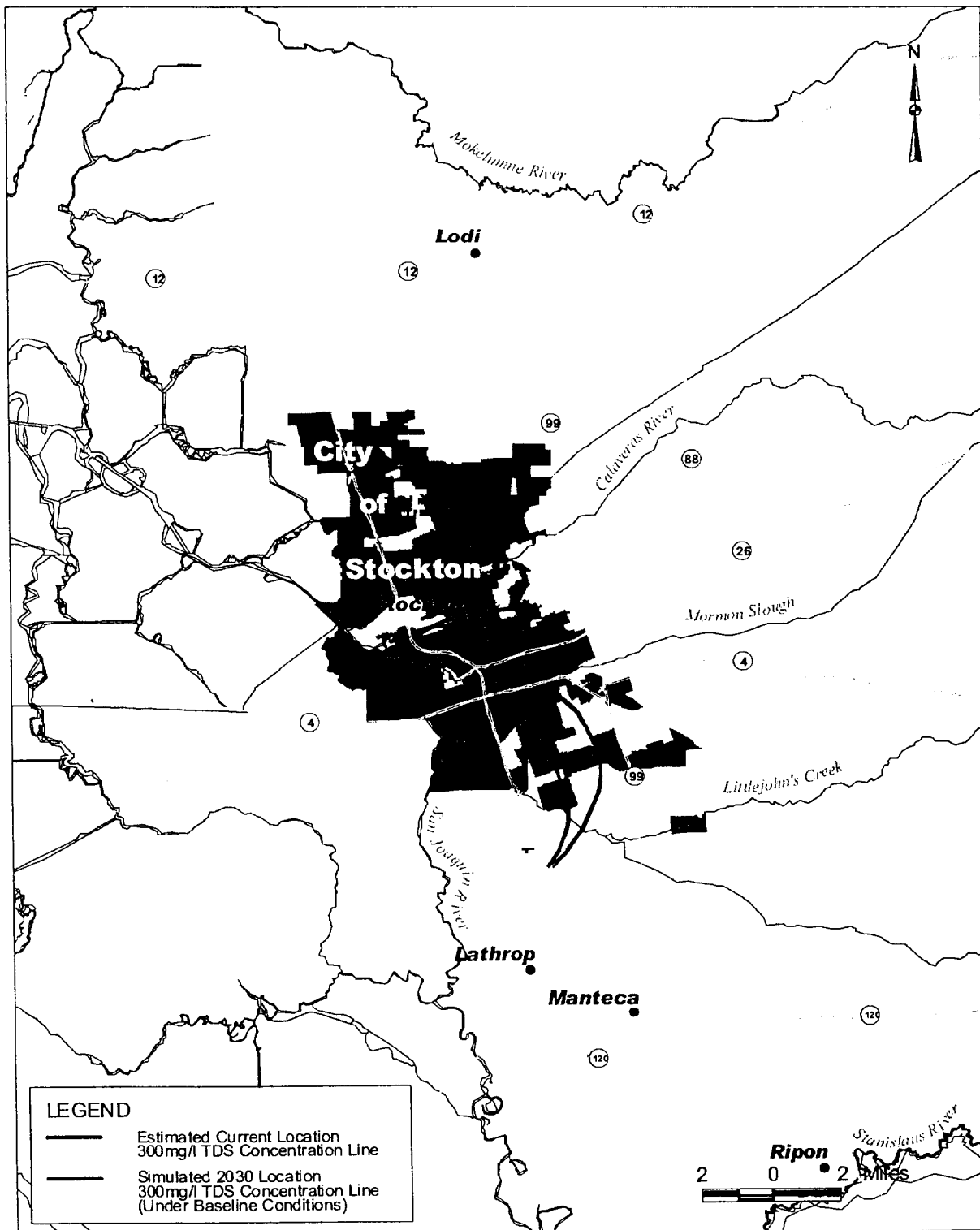
Table 2-2 Simplified Groundwater Balance for Current Conditions		
Groundwater Flow Component	Average Value	Explanation
<i>Inflows (ac-ft per year)</i>		
Deep Percolation/Recharge	608,400	Net infiltration from rainfall, irrigation, canal leakage etc.
Gain from Streams	198,170	Net inflow from streams to groundwater system
Lateral Inflow	98,000	Subsurface inflows
<b>Total Inflows</b>	<b>904,577</b>	
<i>Outflows</i>		
Groundwater Pumping	867,600	Net agricultural, municipal and industrial pumping
Loss to Streams	108,898	Net outflow from groundwater system to streams
Lateral Outflow	35,300	Subsurface Outflows
<b>Total Outflows</b>	<b>1,011,815</b>	
<i>Groundwater Overdraft</i>		
Groundwater from Aquifer Storage	107,238	Total Inflows – Total Outflows
Estimated Saline Water Intrusion	42,000	Lateral Inflow in the Stockton Area
<b>Estimate Total Groundwater Overdraft</b>	<b>150,700</b>	Aquifer Storage Loss + Saline Water Intrusion



Source:

Figure 2-4





**SAN JOAQUIN COUNTY  
WATER MANAGEMENT PLAN**

**Figure 2-9  
Estimated 300 mg/L  
Total Dissolved Solids Line**

**WATER DISTRICTS  
AND AGENCIES**



**CONTRA COSTA  
COUNTY WATER AGENCY**

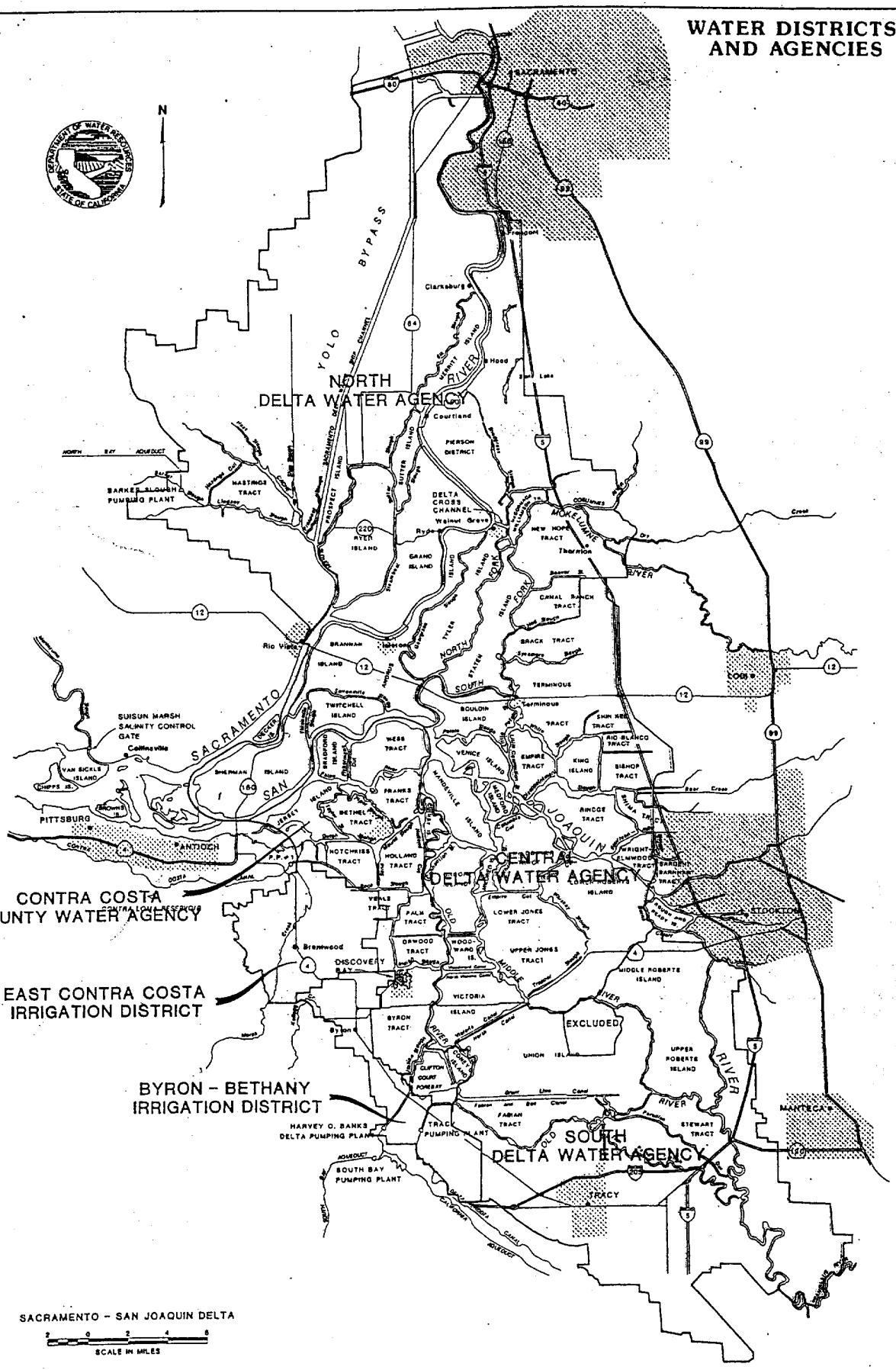
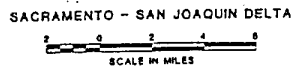
**EAST CONTRA COSTA  
IRRIGATION DISTRICT**

**BYRON - BETHANY  
IRRIGATION DISTRICT**

**NORTH  
DELTA WATER AGENCY**

**CENTRAL  
DELTA WATER AGENCY**

**SOUTH  
DELTA WATER AGENCY**



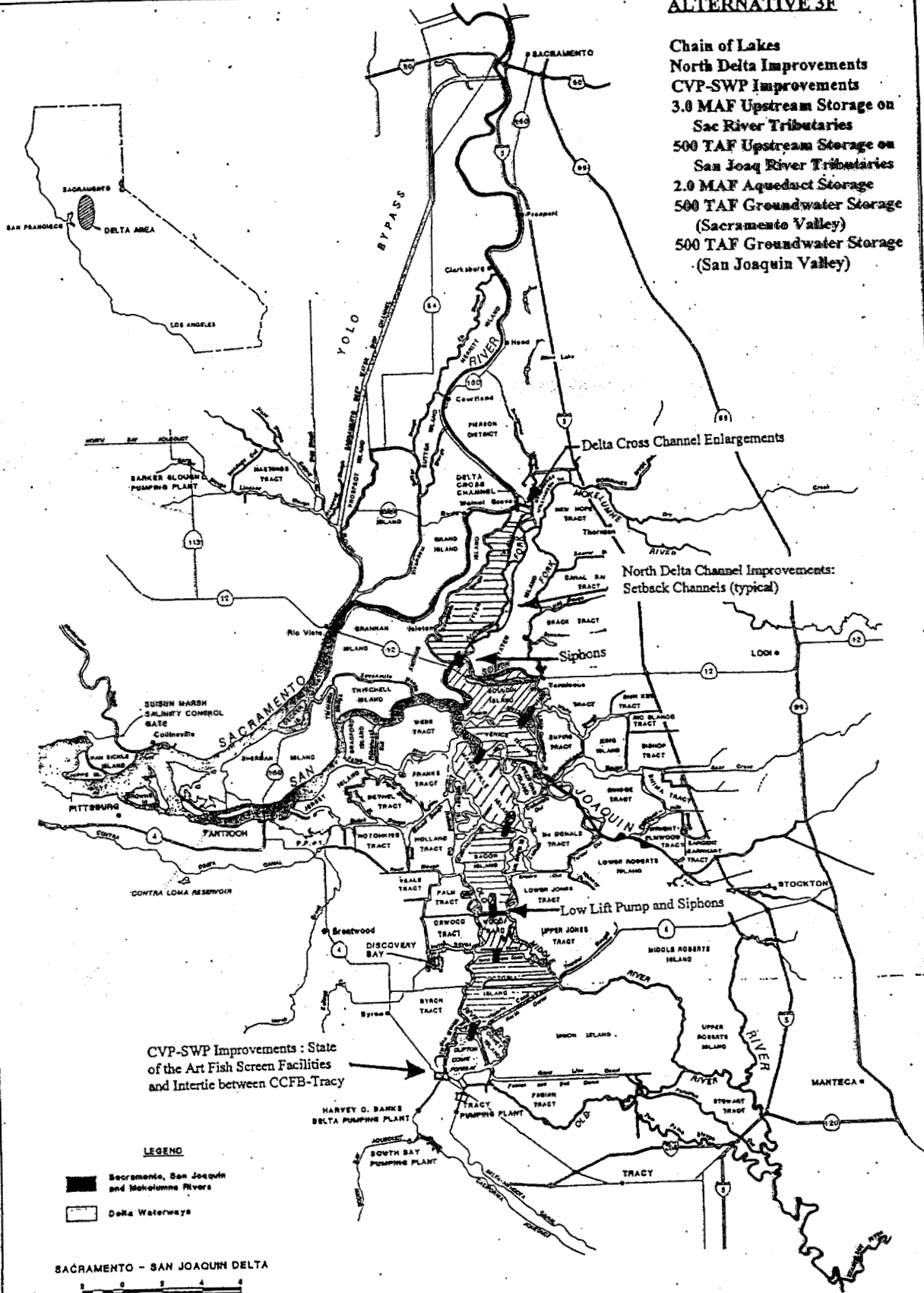
## 71

71



# **ALTERNATIVE 3F**

Chain of Lakes  
 North Delta Improvements  
 CVP-SWP Improvements  
 3.0 MAF Upstream Storage on  
 Sac River Tributaries  
 500 TAF Upstream Storage on  
 San Joaquin River Tributaries  
 2.0 MAF Aqueduct Storage  
 (Sacramento Valley)  
 500 TAF Groundwater Storage  
 (San Joaquin Valley)



CVP-SWP Improvements : State  
 of the Art Fish Screen Facilities  
 and Interlic between CCFB-Tracy

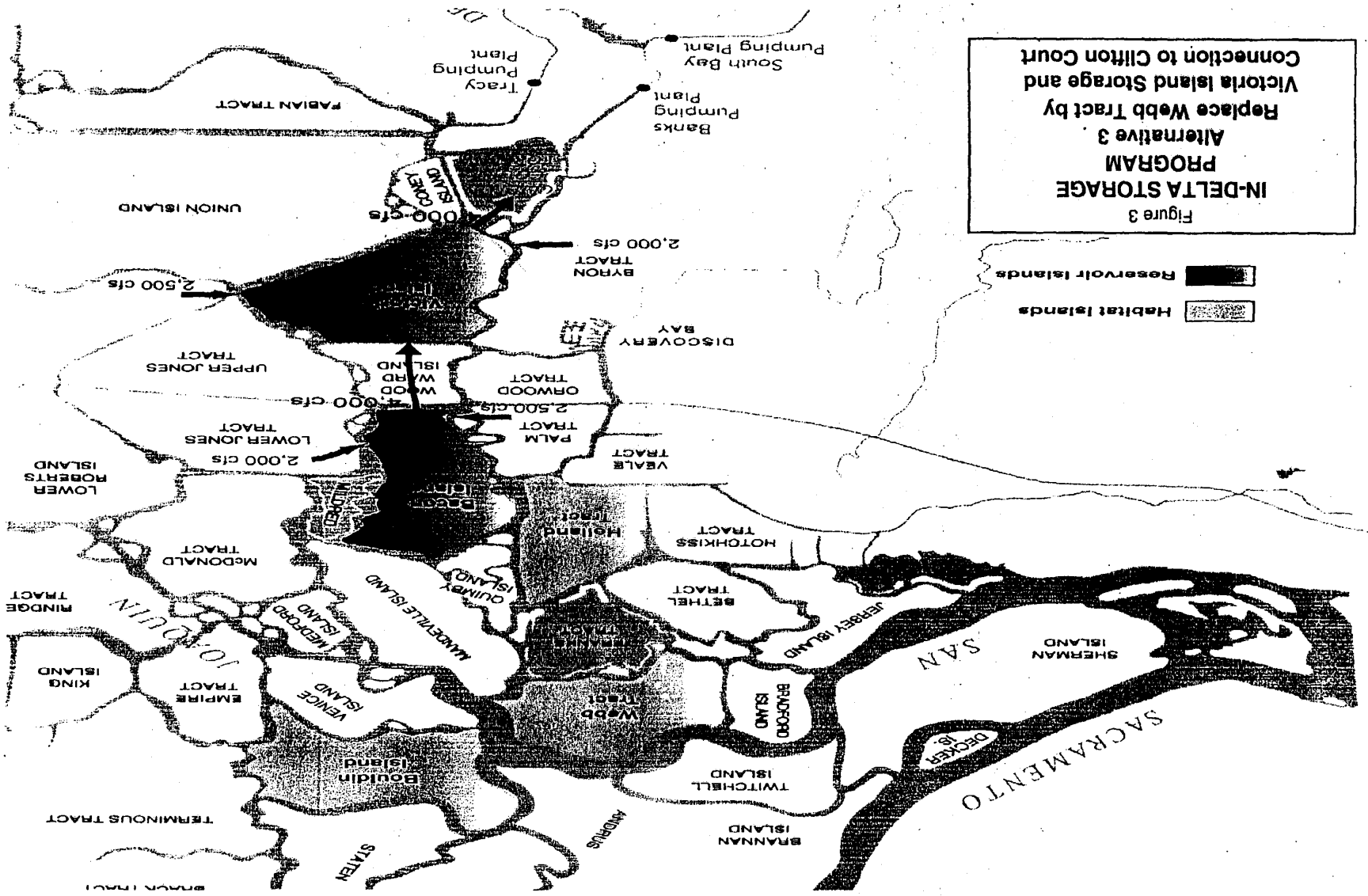
## **LEGEND**

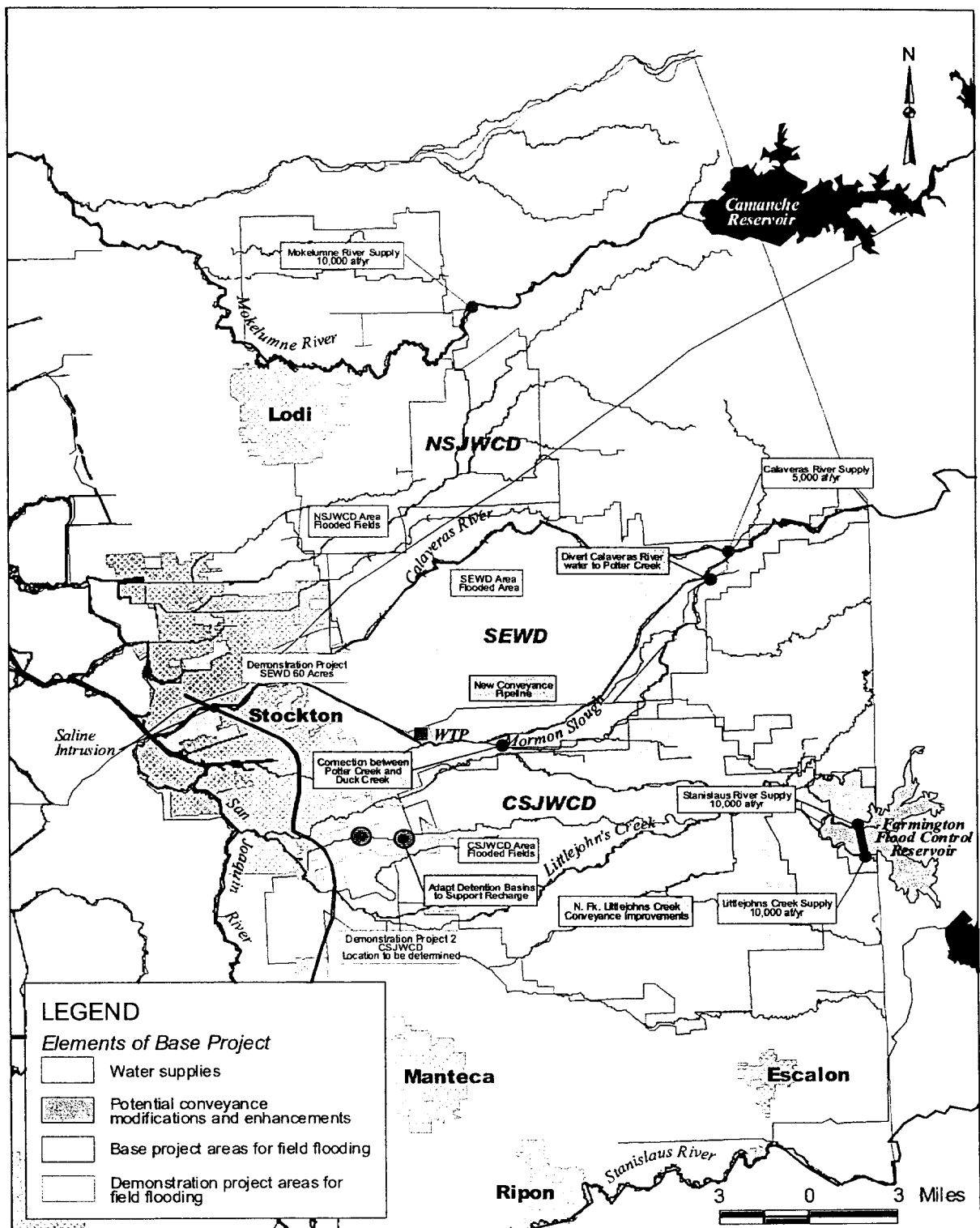
Sacramento, San Joaquin  
 and Mokelumne Rivers  
 Delta Waterways

SACRAMENTO - SAN JOAQUIN DELTA

SCALE IN MILES

# Ein-Dollar-Straße





**SAN JOAQUIN COUNTY  
WATER MANAGEMENT PLAN**

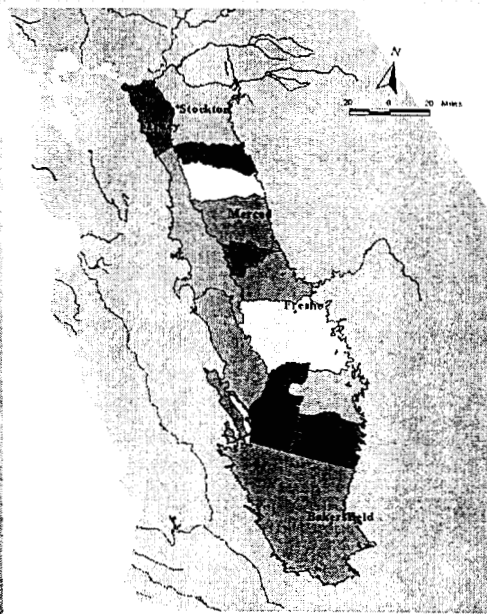
Source: Farmington Groundwater Recharge and Wetlands Feasibility Study Newsletter, March 2001

**Water Supplies and Infrastructure for  
Farmington Groundwater Recharge and  
Wetlands Project, Littlejohn's Creek**

Anthony M. Saracino



Saracino-Kirby-Snow  
a Schumacher Company

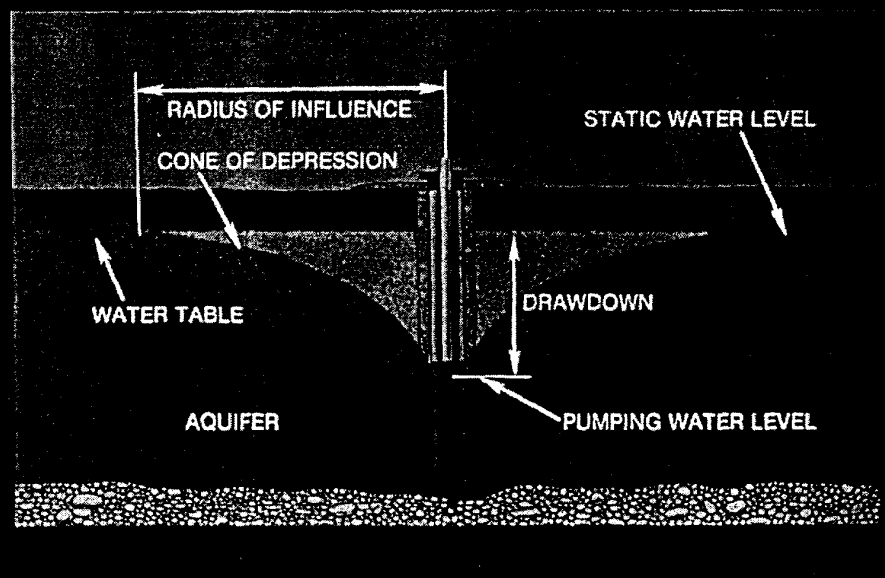


San Joaquin Valley  
Groundwater  
Sub-basins

- Long history of declining groundwater levels in eastern San Joaquin County
- Estimated overdraft: 130,000 to 165,000 acre-feet per year
- Almost 3 million acre-feet mined between 1970 and 1993
- An additional 2 million acre feet will be mined by 2030
- Significant negative impacts resulting from overdraft
- One positive effect: creation of storage space

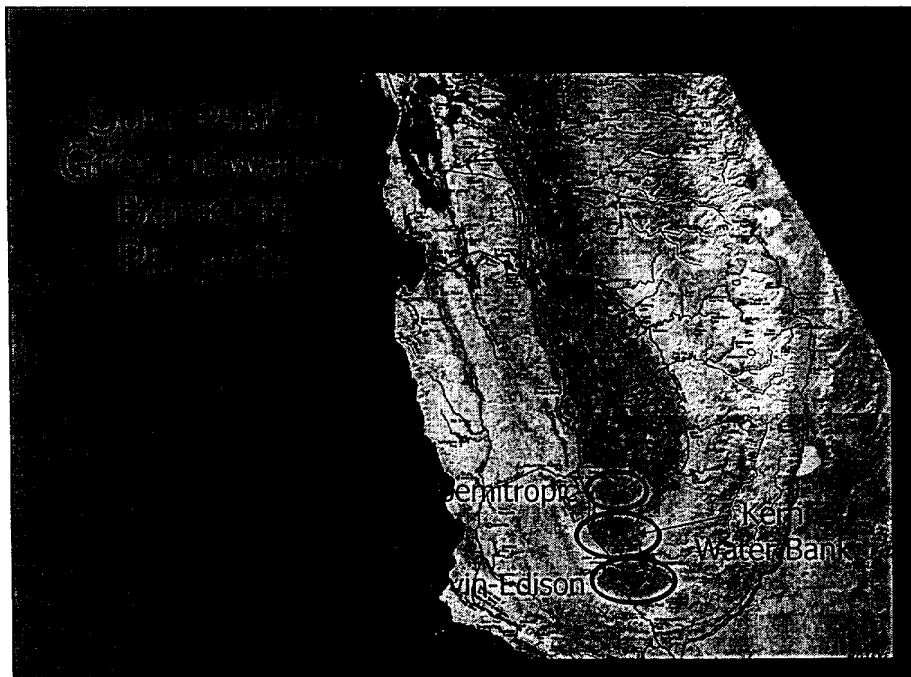
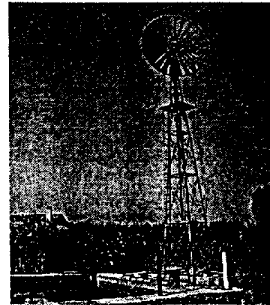


## Common Water Well Terms



Storing water in a groundwater basin during wet years for use during dry years. Storage can be accomplished by:

- Spreading basins
- Injection wells
- In-lieu recharge





- \$24 million - funded by EBMUD
- Up to 14,000 af/yr recharge
- 10 injection wells plus *in lieu* recharge in NSJWCD
- 7000 af average annual recharge
- EBMUD extract 1 in 4 years
- 2:1 put to take ratio
- 3500 af average annual net to groundwater basin



- Groundwater bank operation would be under local control
- The project must provide benefits that make local conditions better than without the project
- Provide mechanism to monitor, measure impacts and limit potentially negative impacts



- 
- Purpose was to provide design data for larger project and to gain stakeholder support
  - Began injection January 13, 1998
  - Initial rate 500 gpm (2.2 af/day)
  - Increased rate to 750 gpm after two weeks of operation (3.3 af/day)
  - Injection ended September 23, 1998
  - Over 300 acre feet successfully injected



It shall be unlawful to extract groundwater underlying the County, directly or indirectly, for use of that groundwater so extracted, outside County boundaries, without first obtaining a permit



JPA formed to provide a consensus-based forum of public water interests to achieve following goals:

- Facilitate development of locally supported groundwater banking projects
- Participate in Freeport project
- Create an entity with power to finance and construct specific projects
- Apply for grant projects



- Great potential for groundwater banking in San Joaquin County
- Many benefits to developing local banking projects
- Groundwater banking has been successfully implemented in many areas throughout CA
- Developing a project will require local leadership and a consensus effort
- Technical, political and institutional issues must be addressed

